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1. (Amended) A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein the members of said cell population have an accessible binding site for a ligand, said method comprising the step of administering to said host a composition comprising an immunogen conjugated to the ligand wherein said immunogen is recognized by an endogenous or an exogenous antibody in the host or is recognized directly by an immune cell in the host; and administering to said host a compound capable of stimulating an endogenous immune response wherein the compound does not bind to the ligand-immunogen conjugate.

22. (Amended) The method of claim 1 wherein the compound capable of stimulating an endogenous immune response comprises a cytokine.

23. (Amended) The method of claim 21 wherein the cytokine comprises IL-2, IL-12, IL-15, or combinations thereof.

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24. (Amended) The method of claim 21 wherein the cytokine comprises IL-2, IL-12, IL-15, or combinations thereof, in combination with IFN- α or IFN- γ .

25. (Amended) The method of claim 21 wherein the cytokine comprises IL-2, IL-12, IL-15, or combinations thereof, in combination with IFN- α or IFN- γ , or a combination thereof, and GM-CSF.

26. (Amended) The method of claim 21 wherein the compound capable of stimulating an endogenous immune response comprises at least one NK cell or T cell stimulant.

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38. (Amended) A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein said population expresses a binding site for a ligand, said method comprising the steps of

administering to the host a composition comprising a complex of said ligand and an immunogen;

administering to the host antibodies directed against the immunogen; and

administering to said host a stimulant of an endogenous immune response that does not bind to the ligand-immunogen complex.

39. (Amended) A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein said population preferentially expresses, uniquely expresses, or overexpresses a folic acid receptor, said method comprising the step of

A3 administering to said host a composition comprising a covalently linked conjugate of an immunogen wherein the immunogen is recognized by an endogenous or exogenous antibody in the host or is recognized directly by an immune cell in the host and a ligand comprising folic acid or a folic acid analogue having a glutamyl group wherein the covalent linkage to the immunogen is only through the γ -carboxy group of the glutamyl group.

40. (Amended) A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein said population preferentially expresses, uniquely expresses, or overexpresses a binding site for a folic acid receptor, said method comprising the step of

administering to said host a composition comprising a covalently linked conjugate of an immunogen wherein the immunogen is recognized by an endogenous or exogenous antibody in the host or is recognized directly by an immune cell in the host and a ligand comprising folic acid or a folic acid analogue having a glutamyl group wherein the covalent linkage to the immunogen is only through the α -carboxy group of the glutamyl group.

41. (Amended) A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein said population preferentially expresses, uniquely expresses, or overexpresses a binding site for a folic acid receptor, said method comprising the steps of

administering to said host a composition comprising a covalently linked conjugate of an immunogen wherein the immunogen is recognized by an endogenous or exogenous antibody in the host or is recognized directly by an immune cell in the host;

administering to said host a ligand comprising folic acid or a folic acid analogue having a glutamyl group wherein the covalent linkage is only through the γ -carboxy group of the glutamyl group; and

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administering to said host a compound capable of stimulating an endogenous immune response wherein the compound does not bind to the ligand-immunogen conjugate.

42. (Amended) A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein said population preferentially expresses, uniquely expresses, or overexpresses a folic acid receptor, said method comprising the step of

administering to said host a composition comprising a covalently linked conjugate of an immunogen wherein the immunogen is recognized by an endogenous or exogenous antibody in the host or is recognized directly by an immune cell in the host;

administering to said host a ligand comprising folic acid or a folic acid analogue having a glutamyl group wherein the covalent linkage is only through the α -carboxy group of the glutamyl group; and

administering to said host a compound capable of stimulating an endogenous immune response wherein the compound does not bind to the ligand-immunogen conjugate.

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43. (Amended) A pharmaceutical composition comprising therapeutically effective amounts of a ligand-immunogen conjugate capable of specific binding to a population of pathogenic cells in a host animal for specific elimination of said cells by an acquired or innate immune response, co-administered antibodies, or directly by an immune cell in the host, a compound capable of stimulating an endogenous immune response wherein the compound does not bind to the ligand-immunogen conjugate, and a pharmaceutically acceptable carrier therefor.

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45. (Amended) The pharmaceutical composition of claim 42 wherein the compound capable of stimulating an endogenous immune response is a cytokine.

46. (Amended) The pharmaceutical composition of claim 45 wherein the cytokine comprises a compound selected from the group consisting of IL-2, IL-12, IL-15, IFN- α , IFN- γ , and GM-CSF, or combinations thereof.

Please add claim 47 as follows:

47. A method of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein the members of said cell population have an accessible binding site for a ligand, said method comprising the step of

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administering to said host a composition comprising an immunogen conjugated to the ligand wherein said immunogen is recognized by an endogenous or an exogenous antibody in the host or is recognized directly by an immune cell in the host; and
administering to said host a therapeutic factor, said factor being selected from the group consisting of a cell killing agent, a tumor penetration enhancer, a chemotherapeutic agent, an antimicrobial agent, a cytotoxic immune cell, and a compound capable of stimulating an endogenous immune response wherein the compound does not bind to the ligand-immunogen conjugate.
